

Amendments to the Claims

Please amend the claims according to the following listing of the claims.

1. (Previously Presented) A foam composed of a high-temperature-resistant thermoplastic selected from the group consisting of polyether sulfones, polysulfones, polyethersulfonamides, and mixtures of these, and having an open-cell structure, wherein the open-cell factor for the foam is at least 75%, wherein the foam has a cell size of from 50 to 2000  $\mu\text{m}$ , wherein cells are distributed across the entire bulk of the foam, and wherein the envelope density of the foam is lower than the envelope density of the high-temperature-resistant thermoplastic alone.
- 2 – 4. (canceled)
5. (Previously Presented) A foam as claimed in claim 1, wherein the plastic has a glass transition temperature above 170°C.
- 6 – 13. (canceled)
14. (Previously Presented) A molding, in particular a sheet, comprising an open-cell foam as claimed in claim 1.
- 15 – 23. (canceled)
24. (Previously Presented) A foam as claimed in claim 1, wherein the open-cell factor for the foam is at least 85%.
25. (Previously Presented) A foam as claimed in claim 1, wherein the open-cell factor for the foam is at least 90%.
26. (Previously Presented) A foam as claimed in claim 1, which has a cell size of from 100 to 1000  $\mu\text{m}$ .
27. (Previously Presented) A foam as claimed in claim 1, which has a cell size of from 100 to 800  $\mu\text{m}$ .
28. (Previously Presented) A foam as claimed in claim 1, which has a density of from 20 to 200 g/l.

29. (Previously Presented) A foam as claimed in claim 1, which has a density of from 20 to 150 g/l.
30. (Previously Presented) A foam as claimed in claim 1, which has a density of from 30 to 100 g/l.
31. (Previously Presented) A foam as claimed in claim 1, which has a density of from 20 to 200 g/l.
32. (Previously Presented) A foam as claimed in claim 26, which has a density of from 20 to 150 g/l.
33. (previously presented) A foam as claimed in claim 27, which has a density of from 30 to 100 g/l.
34. (Previously Presented) A foam as claimed in claim 1, wherein the plastic has a glass transition temperature above 180°.
35. (Previously Presented) A foam as claimed in claim 1, wherein the plastic has a glass transition temperature above 200°.
36. (Previously Presented) A foam as claimed in claim 1, wherein the plastic is thermoplastically extrudable at temperatures above 280°.
37. (Previously Presented) A foam as claimed in claim 1, wherein the plastic is thermoplastically extrudable at temperatures above 300°.
38. (Previously Presented) A foam as claimed in claim 1, wherein the plastic is thermoplastically extrudable at temperatures above 320°.
39. (Previously Presented) A foam as claimed in claim 5, wherein the plastic is thermoplastically extrudable at temperatures above 280°.
40. (Previously Presented) A foam as claimed in claim 34, wherein the plastic is thermoplastically extrudable at temperatures above 300°.
41. (canceled)
42. (Currently Amended) A foam, having an open-cell structure, wherein the open-cell factor for the foam is at least 75%, obtained by extruding

a melt comprising a high-temperature-resistant thermoplastic selected from the group consisting of polyether sulfones, polysulfones, polyethersulfonamides, and combinations thereof,

at least one blowing agent, and

a foaming plastic comprising a cell-opener selected from the group consisting of a pulverulent solid, a foreign polymer, and combinations thereof,

into the open atmosphere at a temperature higher by from 2 to 12°C than the temperature at which a closed-cell foam of the thermoplastic, which is foamed, is formed.